

<b>MUSCULOCUTANEOUS NERVE</b>	
<b>Structure Question</b>	<b>Structure Relationship</b>
What are its spinal cord contributions?	C5, 6, 7
Which cord gives rise to the nerve?	Lateral
How does the nerve enter the anterior (flexor) compartment of the arm?	Penetrates coracobrachialis
Where does the nerve course in the arm?	In anterior (flexor) compartment, between biceps brachii and brachialis
What does it supply in the arm?	Anterior (flexor) compartment muscles: Coracobrachialis Biceps brachii Brachialis
How does the nerve enter the forearm?	Emerges at lateral elbow, between biceps brachii and brachialis and enters subcutaneous tissue
What is terminal branch of the nerve	Lateral cutaneous nerve of forearm
Where does the nerve course in the forearm	In subcutaneous tissue
What does it supply in the forearm?	Skin of lateral forearm (no muscles!)
What does it supply in the hand?	Nothing

MEDIAN NERVE	
Structure Question	Structure Relationship
What are its spinal cord contributions?	C5-T1
Which cord gives rise to the nerve?	Lateral and medial
Where does the nerve course in the arm?	In medial bicipital groove
What other structures are related to the nerve in the arm?	Ulnar nerve Brachial artery Basilic & axillary veins
What does it supply in the arm?	Nothing!
How does the nerve enter the forearm?	Passes under bicipital aponeurosis and passes through cubital fossa
Where does the nerve course in the forearm	Between flexor digitorum superficialis and flexor digitorum profundus
What is the relationship to pronator teres?	Passes between two (ulnar and humeral) heads
What does it supply in the forearm?	All flexor-pronator muscles, <u>except</u> : Flexor carpi ulnaris ½ Flexor digitorum profundus
What does the anterior interosseous nerve (termination of deep branch) supply?	Deep anterior forearm muscles
Are there sensory branches in the forearm?	Palmar cutaneous branch (lateral proximal palmar skin)
How does the nerve enter the hand	Through the carpal tunnel
What is the position of the nerve in the carpal tunnel?	Superficial (just medial to tendon of FCR...even though this tendon does <u>not</u> go through the tunnel)
What other structures use this passageway?	9 tendons of FDS (4), FDP (4), & FPL (1)
Which carpal bones are related to this passageway?	Lateral: Scaphoid & trapezium Medial: Pisiform & hamate (hamulus)
Are there sensory branches in the hand?	Palmar branches (lateral distal palmar skin) Digital branches (lateral 3½ digits)
What muscles does the median nerve supply in the hand?	Thenar muscles

ULNAR NERVE	
Structure Question	Structure Relationship
What are its spinal cord contributions?	C8-T1
Which cord gives rise to the nerve?	Medial
Where does the nerve course in the arm?	In medial bicipital groove
What does it supply in the arm?	Nothing!
What bone is it related to at the elbow?	Posterior to medial epicondyle
How does the nerve enter the forearm?	Through the cubital canal
Where does the nerve course in the forearm	Deep to flexor carpi ulnaris
What does it supply in the forearm?	Flexor carpi ulnaris 1/2 Flexor digitorum profundus
How does the nerve enter the hand?	Through the ulnar canal (Guyon)
What other structures use this passageway?	Ulnar artery and vein(s)
Which carpal bones are related to the ulnar canal?	Pisiform Hamate (hamulus)
Where does the nerve course in the hand?	Superficial branch: sensory to digits 1/2 of 4 & 5 (including posterior tips) Deep branch: motor to most intrinsic hand muscles (including deep part of FPB)

<b>RADIAL NERVE</b>	
<b>Structure Question</b>	<b>Structure Relationship</b>
What are its spinal cord contributions?	C5-T1
Which cord gives rise to the nerve?	Posterior
Where does the nerve course in the arm?	In radial (spiral) groove
What other structures in the arm are related to the nerve?	Profunda brachii artery & veins
What does it supply in the arm?	Triceps brachii Anconeus
Are there sensory branches in the arm?	Yes..to skin of posterior arm
What structures are the nerve related to just proximal to the forearm?	Between brachialis and brachioradialis
Which side, and which part, of the humerus does the nerve pass as it leaves the arm and enters the forearm?	Anterior aspect of the lateral supracondylar ridge
Where does the nerve course in the forearm?	In extensor-supinator compartment
Where does the nerve divide into superficial and deep branches?	In the cubital fossa
What are the major branches of the nerve at the elbow? What does each branch do	Superficial branch – sensory Deep branch – motor
What does it supply in the forearm?	All extensor-supinator muscles
What are the relationships of the superficial radial nerve in the distal forearm?	It travels deep to brachioradialis and emerges to branch in subcutaneous tissue over anatomical snuff box (it lies superficial to extensor retinaculum)
Are there sensory branches in the forearm?	Yes...posterior cutaneous nerve of forearm
What does the posterior interosseous nerve (termination of deep branch) supply?	Deep posterior forearm muscles
Are there sensory branches in the hand?	Yes...to lateral dorsum of hand & lateral 3½ digits
Does the nerve supply the tips of the fingers?	NO.
Does the nerve supply any muscles in the hand?	NO.

AXILLARY NERVE	
Structure Question	Structure Relationship
What are its spinal cord contributions?	C5-6
Which cord gives rise to the nerve?	Posterior
How does the axillary nerve reach the posterior shoulder?	It passes through the quadrangular space
What other structure passes through the quadrangular space with the nerve?	Posterior circumflex humeral artery (veins)
Which part of the humerus is related to the nerve?	Surgical neck
What does it supply in the shoulder?	Yes...skin over the deltoid.
Are there sensory branches in the arm?	Yes..to skin of posterior arm
What does it supply in the arm?	Nothing! (I consider the deltoid part of the shoulder)

**AXILLARY ARTERY**

<b>Structure Question</b>	<b>Structure Relationship</b>
What vessel continues as the axillary artery?	Subclavian
Where does the axillary artery begin?	Lateral border of rib 1
Where does the axillary artery end?	Lower border of teres major
Where is the first part of the axillary artery located?	Medial to pectoralis minor
What are its branches?	Superior thoracic
Where is the second part of the axillary artery located?	Posterior to pectoralis minor
What are its branches?	Thoraco-acromial Lateral thoracic (sometimes absent)
What nerve is usually paired with the lateral thoracic artery?	Long thoracic nerve
If the lateral thoracic artery is not present, what other artery helps supply serratus anterior?	Thoracodorsal
Where is the third part of the axillary artery located?	Lateral to pectoralis minor
What are its branches?	Subscapular Anterior circumflex humeral Posterior circumflex humeral
What nerve is usually paired with the thoracodorsal artery?	Thoracodorsal nerve
What happens to the artery in the arm?	It continues as the brachial artery.

**BRACHIAL ARTERY**

<b>Structure Question</b>	<b>Structure Relationship</b>
Where does the brachial artery begin?	Lower border of teres major
Where does the brachial artery end?	In the cubital fossa
What is the first branch of the brachial artery?	Profunda brachii artery (deep artery of the arm)
What nerve is usually paired with the profunda brachii?	Radial nerve
What is the generic name for branches of the brachial artery that supply the elbow joint proximal to its terminal branches?	Collateral arteries
What are the terminal branches of the brachial artery?	Radial and ulnar
What is the generic name for branches of the brachial artery that supply the elbow joint distal to its terminal branches?	Recurrent arteries

<b>RADIAL AND ULNAR ARTERIES</b>	
<b>Structure Question</b>	<b>Structure Relationship</b>
Where do the radial and ulnar arteries begin?	In the cubital fossa
Where do the radial and ulnar arteries end?	In the hand, these arteries anastomose to form the palmar arterial arches
What branch of the ulnar artery gives rise to arteries that course along the interosseous membrane of the forearm?	Common interosseous artery
What nerve is usually paired with the anterior interosseous artery?	Anterior interosseous nerve
What nerve gives rise to the anterior interosseous nerve?	Median nerve
What nerve is usually paired with the posterior interosseous artery?	Posterior interosseous nerve
What nerve gives rise to the posterior interosseous nerve?	Deep (terminal) branch of radial nerve
How does the radial artery enter the palm?	It courses through the anatomical snuff box and then between the two heads of the first dorsal interosseous muscle.
How does the ulnar artery enter the palm?	It courses through the ulnar canal (Guyon).